



# **Immersive Audio**

## **Techniken und Werkzeuge in der Livebeschallung**

**Martin Mayer**  
**Klosterneuburg, Austria**

**AT**  
**MIX**  
3D AUDIO

 **mister  
master**



## Wiener Philharmoniker

Open Air/ Wien – Heldenplatz/ Berlin – Unter den Linden/ 1999

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**



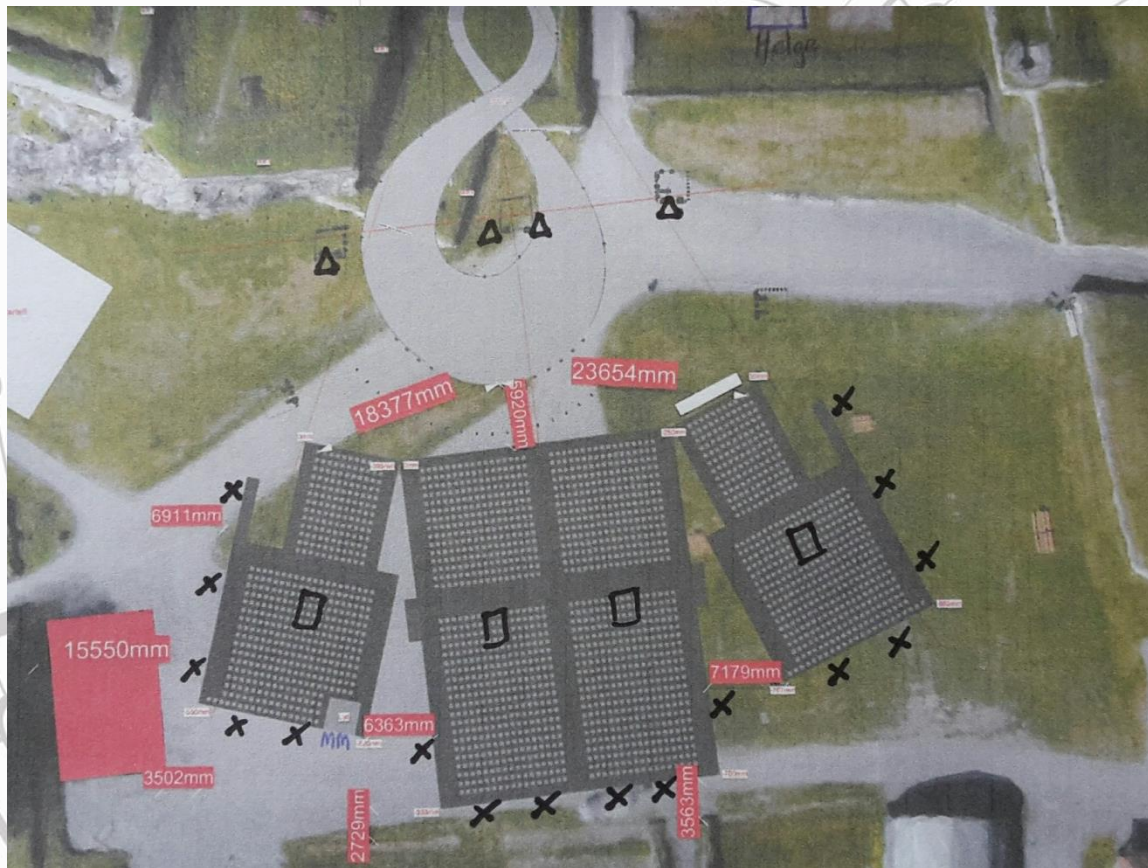
## Panoramic View/ Tosca

Oper im Steinbruch/ St.Margarethen/ 2015

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**





## Scetch of speaker positions

Opera Østfold at Fredriksten Fortress/ Halden/ Norway/ 2017

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**



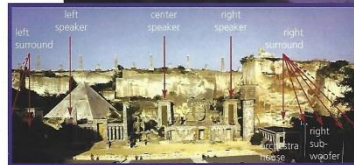
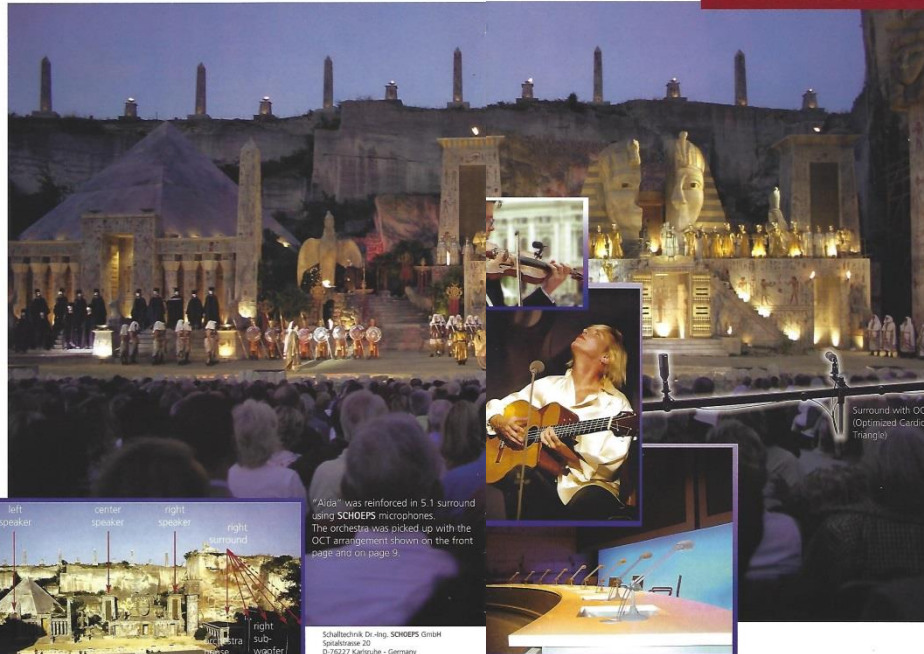
**OCT Main Orchestra Microphone**





**Extended OCT Main Orchestra Microphone with  
ORTF instead of center cardioid**

## Product Overview



AIDA – St. Margarethen Opera Festival, Austria 2004, www.ofa.at – sound by www.MistakMaster.at  
cover photos: Tom Becker, gina magazine

Subject to change without notice. Not responsible for errors or omissions - 060203

"Aida" was reinforced in 5.1 surround using **SCHOEPS** microphones. The orchestra was picked up with the OCT arrangement shown on the front page and on page 9.

Schalltechnik Dr.-Ing. **SCHOEPS** GmbH  
Sollnstrasse 20  
D-76227 Karlsruhe - Germany  
Tel.: +49 (0)721 943 20-0  
Fax: +49 (0)721 493 750

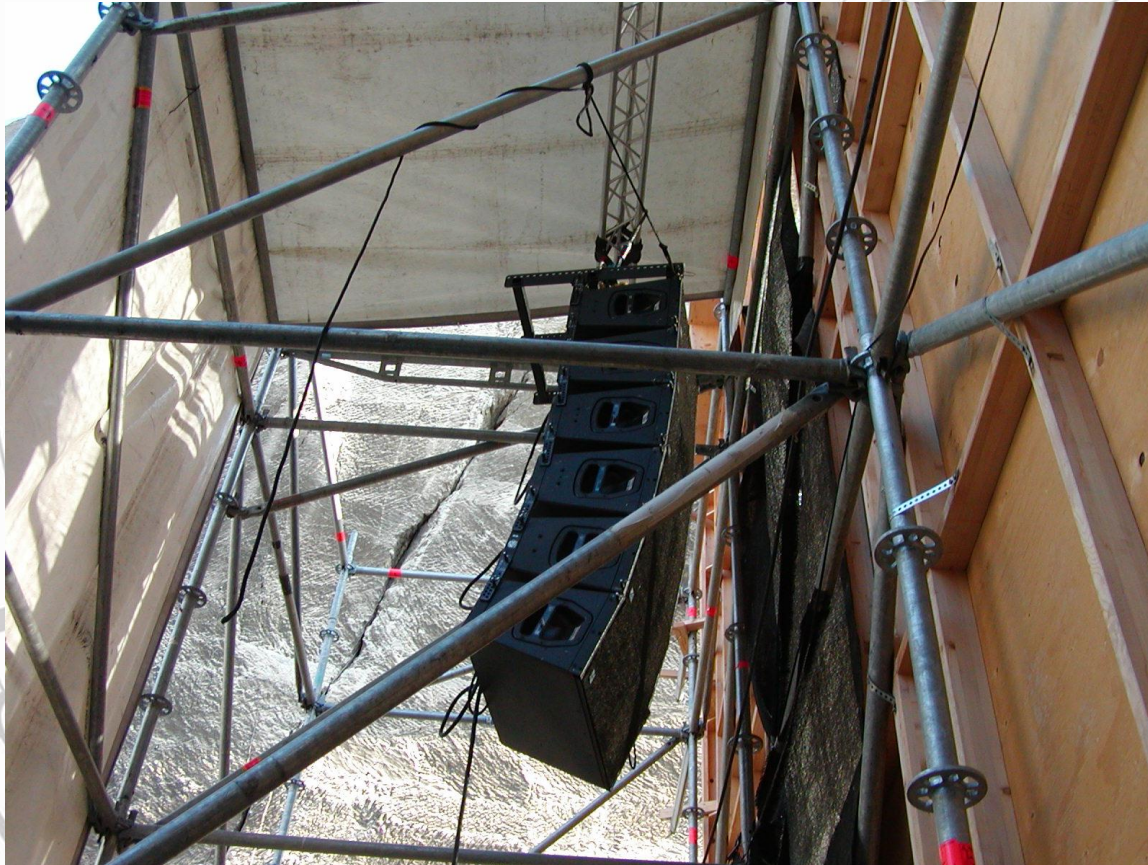
www.schoeps.de / mail@schchoeps.de

## Schoeps Product Overview 2005

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**





**Typical Line Array as Main System in Outdoor Opera Production**





Foto  
Musikverein, Wien

Mobile digital concert hall

AT  
MIX  
3D AUDIO

mister  
master



**Part of the arena as seen from stage including  
Surround Speakers**

Opera Østfold at Fredriksten Fortress/ Halden/ Norway/ 2017

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**





## **Set and Surround Speakers/ Tryllefløyten**

Opera Østfold at Fredriksten Fortress/ Halden/ Norway/ 2017

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**



## Stage and Main Arrays/ Tryllefløyten

Opera Østfold at Fredriksten Fortress/ Halden/ Norway/ 2017

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**

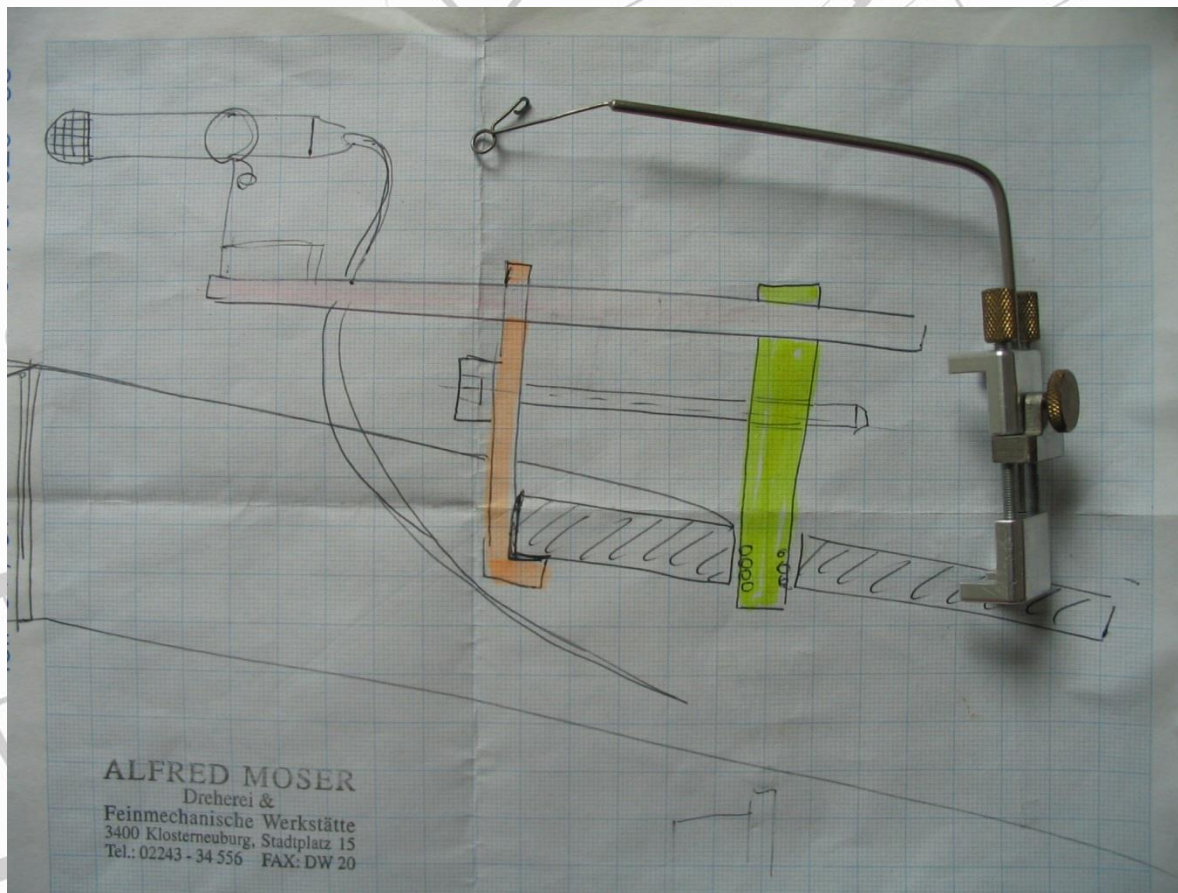




**Opus Deutscher Bühnenpreis  
Sound Design/ 2005**

**AT  
MIX**  
3D AUDIO

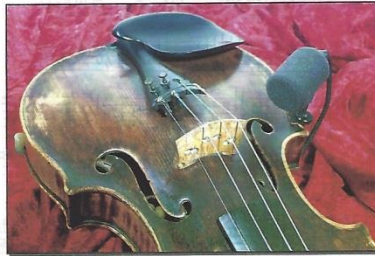
**mister  
master**



**Early prototype of instrument-adaptor for violin and lavalier mic**



## First uncompromising string-section "pick-up"



### New to rent: a Schoeps condenser-microphone for every instrument of an orchestra

"Picking-up" and amplifying of string-sections for recording, live- and TV-shows has always been a quite special challenge, especially in crossover-projects. With our new system by Schoeps an uncompromising solution exists for the first time:

- high-end, cardioid Schoeps condenser-microphone for every instrument
- warm, natural and well balanced sound
- high gain before feedback, excellent acoustic separation



### 60 Schoeps condenser-microphones with instrument-adapters

- for violin, viola, cello and double-bass
- can be mounted quickly and easily by each musician
- no customisation of valuable instruments, usable at short notice
- mounting at non-resonating position (chin-rest principle)
- no damping or change of the natural sound of instruments
- low mass, no obstruction of common playing-techniques

### Only the best is good enough.

That's what we have learned from our work as sound-designer and rental-experts for many stars of the international classic-, jazz- and pop-scene. That's why this system is available to our customers world-exclusive from 2001 - for soloists, string-quartets or a whole symphony-orchestra...

...specific tasks need specific solutions.

### AUDIO ENGINEERING & AUDIO RENTAL

Martin Mayer + Diana Mayer-Blaimschein, A-3400 Klosterneuburg, Buchbergg. 61  
 Fon/ Fax: +43 (0)2243/ 22058, e-mail: [mr.master@xpoint.at](mailto:mr.master@xpoint.at), Homepage: [www.mistmaster.at](http://www.mistmaster.at)



## Fact sheet for Schoeps String "Pick-Up" system

**AT**  
**MIX**  
 3D AUDIO

**mister**  
**master**



CELLO & C-BASS:  
BOOM → STEIG  
KAPSEL NICHT VOR!  
F-LOCH!

• AUSRICHTUNG  
KAPSEL: GERADE  
RICHTUNG STEIG

• MONTAGE:  
KINNHALTER-  
PRINZIP

• SCHALLSTOFF =  
SOLOPHONIUM-  
SCHUTZ

MUSS VERWENDET  
WERDEN

## Erstes kompromißloses Streicher-"Pick-up"-System

**Neu im Verleih:** ein Schoeps-Mikrofon für jedes Streich-Instrument eines Orchesters!

Die Abnahme und Verstärkung von Streichinstrumenten für Recording, Live- und TV-Shows stellt immer eine große Herausforderung dar, insbesondere bei Crossover-Projekten. Mit unserem neuen System von Schoeps gibt es nun erstmals eine kompromißlose Lösung:

- hochwertiges, gerichtetes Schoeps-Kondensatormikrofon an jedem Instrument
- warmes, natürliches und ausgewogenes Klangbild
- hohe Unempfindlichkeit gegenüber Rückkopplungen, hervorragende akustische Trennung

### 80 Schoeps Kondensator-Mikrofone und Instrumenten-Adapter

- für Violine, Viola, Cello und Kontrabaß
- von jedem Musiker selbst rasch und einfach zu befestigen
- kein Eingriff an wertvollen Instrumenten, kurzfristig einsetzbar
- Befestigung am schwingungstoten Punkt (Kinnhalter-Prinzip)
- keinerlei Dämpfung oder klangliche Beeinflussung der Instrumente
- durch geringe Masse keine Behinderung üblicher Spieltechniken



HORIZONTALE AUSRICHTUNG DER KAPSEL:  
2 GEGENEINANDER VERDREHBARE SCHRAUBEN  
OBERES TEIL EINSTELLEN, MIT UNTEREM  
FIXIEREN.

Das Beste ist gerade gut genug.

Das hat uns unsere Arbeit als Sounddesigner und Equipment-Verleih für viele Stars der internationalen Klassik-, Jazz- und Pop-Szene gelehrt.

...besondere Aufgaben bedürfen besonderer Lösungen.

Mister Master Martin Mayer  
Summeggasse 21  
3400 Klosterneuburg  
Austria / Europe

Fax: +43 (0)2243 22058  
office@mistermaster.at  
www.mistermaster.at  
UID: ATU17031307

Bank Austria Klosterneuburg  
BLZ 11000 Kontonr. 03443541200  
IBAN AT8411000003443541200  
BIC BKAUAT33XXX

## Mounting instructions for Schoeps String "Pick-Up" system

**AT**  
**MIX**  
3D AUDIO







**Julian Rachlin with Guarneri del Gesù from 1741  
with Schoeps String “Pick-Up” system**

**AT  
MIX**  
3D AUDIO

**mister  
master**



**Julian Rachlin and Wiener Symphoniker/ TV show for ORF  
with Schoeps V4 U**

**AT  
MIX**  
3D AUDIO

**mister  
master**





**Schoeps String “Pick-Up” system/ IEM for orchestra**



## Voestival with Bruckner Orchestra Linz 2004

„Circus meets Classic - ein Sommernachtstraum“

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**





## Opening Wiener Festwochen 2005

Marianne Faithfull, Nina Hagen, Chaka Khan and Omara Portuondo

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**

**SCHOEPS**  
Mikrofone



当热情  
引爆激情...

热烈庆祝  
第100代 **SCHOEPS**  
麦克风诞生!



SCHOEPS Mikrofone  
修比特大道 20 号  
76227 德国 - 卡尔斯鲁厄  
电话: +49 721 943 200

Diana Mayer-Blaimschein  
和 Martin Mayer 是:

**SCHOEPS**  
Mikrofone



[www.schoeps.de](http://www.schoeps.de)



[www.mistermaster.at](http://www.mistermaster.at)

**Celebrating our 100<sup>th</sup> Schoeps Microphone**

**AT**  
**MIX**  
3D AUDIO

**mister master**





**Mister Master's Microphone Museum**

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**



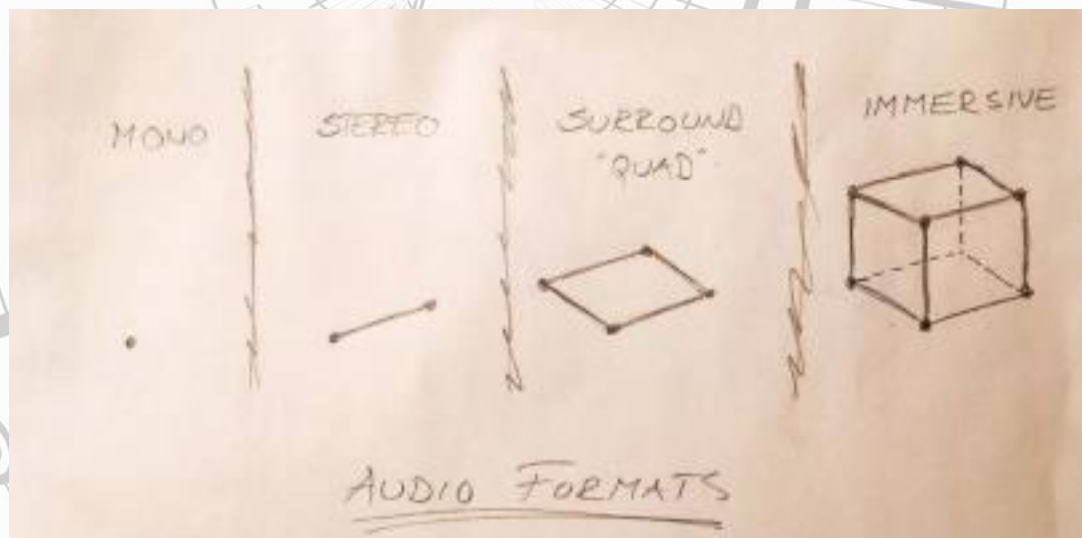
## **First use of Trinnov Optimizer loudspeaker/room optimization technology in a live PA setup**

From left to right: Arnaud Laborie (Trinnov Audio), Peter Willensdorfer (Tonarchitektur), Martin Mayer (Mister Master)

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**





**Audio Formats by Tomi Pietilä**



**Atmix 3D Audio Lab/ Klosterneuburg, Austria**

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**





**Tetragon Project/ Graz/ 2016**

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**



Al di Meola/ Graz/ 2016





**Mixing Audio Live in 3D/ MUMUTH Graz/ 2016**

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**



**Schoeps ORTF 3D**





## Alessandro Quarta 5et interpreted Astor Piazzolla

IAN Immersive Audio Recording Project/ Lecce, Italy/ 2017

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**





**Siemens Arts Program/ Tschaikowsky/ Rococo Variations**  
**IAN Immersive Audio Recording Project/ Munich, Germany/ 2017**

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**



## **Immersive Audio Atmo Recording**

Railway tunnel under construction/ 2017

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**





**Immersive Audio Network**



### **IAN Immersive Audio Network**

From left to right: Martin Mayer (Atmix 3D Audio Labs),  
Stefan Bock (MSM Studio Group), Stefan Zaradic (zaraproduction)

**AT  
MIX**  
3D AUDIO

**mister  
master**



[www.atmix.at](http://www.atmix.at)  
[www.mistermaster.at](http://www.mistermaster.at)

**AT**  
**MIX**  
3D AUDIO

**mister**  
**master**